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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, NHON D

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 08/13/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/499,442	Applicant(s) GREER ET AL.	
	Examiner Nhon (Gary) D Nguyen	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) is/are withdrawn from consideration.
- 5) ☐ Claim(s) is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) is/are objected to.
- 8) ☐ Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. .
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). <u> </u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u> </u> | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

1. This communication is responsive to Amendment A, filed
2. Claims 1-16 and 18-20 are pending in this application. Claims 1, 4, 7, 16, and 20 are independent claims. In the Amendment A, claims 17 are canceled, and claims 1, 3, 4, 6, 7, 16, and 18-20 are amended. This action is made final.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1, 2, 4, 5, 7, 13, 16, 18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by LaJoie et al. ("LaJoie", US #5,850,218).

As per independent claim 1, LaJoie teaches a user interface for use with a computer system (abstract; *the set-top terminal incorporates a central processing unit*), said user interface comprising:

Selecting means for selecting from a list of predetermined computer applications (col. 29, lines 5-16; *highlighting and selecting*).

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A conflict map containing a list of conflicts between the list of predetermined computer applications (col. 29, lines 17-19);

Conflict checking means, coupled to the selecting means and the conflict map, for receiving the selection signal, determining from the selection signal and the conflict map whether a potential conflict between computer applications could occur (col. 29, lines 20-23), and outputting a display message if a determination is made that a potential conflict could occur between computer applications (col. 29, lines 30-32).

As per claim 2, which is dependent on claim 1, LaJoie teaches selecting means comprises a remote control (col. 4, lines 54-55).

A system with a remote control would have an input device interface, for receiving signals from the remote control and converting the signals from the remote control into command signals.

As per independent claim 4, it is a similar scope to claim 1; therefore, it should be rejected under similar rationale.

As per claim 5, which is dependent on claim 4, wherein said step of outputting a display message further comprises the step of:

Prompting a user to select another application if determination is made that a potential conflict could occur (col. 29, lines 30-32; col. 21, line 30-col. 22, line 5).

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As per independent claim 7, LaJoie teaches a method for selecting one of at least two predetermined device application modes in a microprocessor controlled television set-top system (abstract; *the set-top terminal incorporates a central processing unit*), comprising the steps of:

Selecting a first device application mode from a predetermined menu of device application modes, which menu includes at least two such predetermined device application modes. The first device application mode in this case is programs selected from the Direct Broadcast Satellite System (DBSS, col. 2, lines 21-25; first device application mode).

Determining whether a second of said at least two such predetermined device application modes is active. Since this is a television system that receives DBSS through a converter box, it assumes to have a capability of receiving programs from Local Network Broadcast Antenna (LNBA, second device application mode). If LNBA were in use (active), in this case the system would determine whether LNBA is active.

It is inherent in LaJoie's system to determine from a conflict map containing a list of device conflicts between the at least two predetermined device application modes whether a potential conflict could occur, and

Initiating television presentation of activities relating to first device application mode if it is determined a potential device conflict may not occur (Browse information banner of fig. 8 would show this).

As per claim 13, which is dependent on claim 7, wherein step of selecting comprises the step of selecting with a remote control device (col. 4, lines 53-55; fig. 3, Remote 59, col. 14, line 66).

As per independent claim 16, it is a similar scope to claim 7; therefore, it should be rejected under similar rationale.

As per claim 18, which is dependent on claim 17, it is a similar scope to claim 2; therefore, it should be rejected under similar rationale.

As per independent claim 20, it is a similar scope to claim 7; therefore, it should be rejected under similar rationale. In addition, the fact that LaJoie includes a computer system, it would have a computer program with computer code.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie.

As per claim 3, which is dependent on claim 2, Lajoie does not disclose the specifics of the remote control and the converter in the set-top system. Examiner takes official notice that it is well known that a remote control comprises infrared signals and that these signals would have to be converted to USB signals in the set-top system by the converter. It would have been obvious to an artisan at the time of the invention to use the teaching of a remote control

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using infrared signals and the converter to convert to USB signals in the set-top system of LaJoie so that it could control multiple devices connected to the system.

As per claim 19, which is dependent on claim 18, it is a similar scope to claim 3; therefore, it should be rejected under similar rationale.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie in view of Lee (US #6,204,884).

As per claim 6, which is dependent on claim 5, LaJoie does not show determining whether a television or a computer monitor has been connected to the computer system, and selecting hardware in a video output device in the computer system to engage alternate video ports to produce an optimal quality output in response to said determining step. Lee disclose a multisystem TV which can be used as a PC monitor and enable viewing of the NTSC, DBS, and HDTV broadcasting (col. 1, lines 48-51), and selecting hardware in a video output device in the computer system to engage alternate video ports to produce an optimal quality output (col. 1, lines 56-67; col. 2, lines 1-13). It would have been obvious to an artisan at the time of the invention to use the teaching of determining whether a television or a computer monitor has been connected to the computer system, and selecting hardware in a video output device in the computer system to engage alternate video ports to produce an optimal quality output in LaJoie's system since it would allow the system to select the optimal quality output in response to whether a television or a computer monitor has been connected to the computer system.

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8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie in view of Farleigh (US #6,208,388).

As per claim 8, which is dependent on claim 7, LaJoie does not show halting the second of said at least two such predetermined device application modes upon initiation of the first device application mode. Farleigh discloses in fig. 3 (SS1 62, and SS2 61), a television system that can receive programs from Direct Broadcast Satellite Dish (DBSD, first device application mode) and programs from Local Network Broadcast Antenna (LNBA, second device application mode). This system employs an Automatic Channel Response Input Selection switch, which can automatically switch between DBSD programs and local LNBA programs (fig. 3, automatic channel response input selection switch 26). Upon switching to DBSD programs (first device application mode) from LNBA programs (second device application mode), and if LNBA programs were still active, the LNBA programs would be halted. It would have been obvious to an artisan at the time of the invention to use the teaching of halting the second device application mode upon initiation of the first device application mode in LaJoie's system so that only one active device application mode is active at a time.

9. Claim 9, 10, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie in view of Klosterman et al ("Klosterman", US #5,940,073).

As per claims 9 and 10, which are both dependent on claim 7, LaJoie does not show minimizing the second application mode. Klosterman discloses in fig. 6(d) and col. 9, lines 54-58 minimizing an application mode (in form of "picture in picture") when a new application mode is initiated. It would have been obvious to an artisan at the time of the invention to use the

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teaching of minimizing one application mode when an additional application mode is initiated in LaJoie's system since it would allow the user to see both applications at the same time on the screen.

As per claim 11, which is dependent on claim 10. Klosterman discloses in fig. 6(d) selected window (688) is subordinated in a web browser environment (680).

As per claim 12, which is dependent on claim 11, LaJoie does not show presenting a control panel for setting operating parameters for the second device application mode within a selected window. Klosterman discloses presenting a control panel (col. 2, line 36, *and an on screen menu with cursor or pointer control*) for setting operating parameters for the second device application mode within a selected window (col. 2, lines 26-67 and col. 3 lines 1-9). It would have been obvious to an artisan at the time of the invention to use the teaching of presenting a control panel for setting operating parameters for the second device application mode within a selected window in LaJoie's system since it would give user a means for setting operating parameters for the second device application mode, which would give the same flexibility as if this was not minimized.

10. Claim 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie in view of Sciammarella et al ("Sciammarella" US # 6,320,599).

As per claim 14, which is dependent on claim 7, LaJoie does not show step of selecting comprises the step of selecting through an on-screen emulation of a remote control device.

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Sciammarella discloses in col. 4, lines 49-50 a touch screen used as an input device. It would have been obvious to an artisan at the time of the invention to use the teaching of Sciammarella of a touch screen, in place of the remote control, in LaJoie's system since they are known equivalent input devices.

As per claim 15, which is dependent on claim 7, LaJoie does not show step of selecting is made by clicking a mouse over an active portion of a screen image of a control panel image. Sciammarella discloses in col. 4, lines 49-50 a mouse used as an input device. It would have been obvious to an artisan at the time of the invention to use the teaching of Sciammarella of a mouse in place of the remote control in LaJoie's system since they are known equivalent input devices.

Response to Arguments

11. Applicant's arguments filed 06/02/03 have been fully considered but they are not persuasive.

Applicants argued the following:

(a) In the present invention, a sophisticated set-top consumer appliance is disclosed with a number of features and applications. As known in the art, the term "application" refers to a program running on a computer. An application is not the TV show as disclosed by LaJoie. LaJoie only discloses conflicts between times of TV shows not between two computer programs conflicting with one another. Thus, LaJoie cannot be relied upon to teach or suggest the concept of applications conflict checking, and the rejection fails. Again, the term "applications" has an

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ordinary meaning in the computer arts, and the term should be interpreted as such. The term "applications" has not been used in the art to describe television shows. The Examiner cannot invent a meaning to a term contrary to that used in the art.

(b) Independent claims 1 and 4 of the present application include the limitation of using a conflict map to determine in advance if a computer program will conflict with another program ("application") running on the computer, before the program is run. In this manner, the apparatus will be far less likely to "crash" if two conflicting applications are run. In Prior Art systems, conflicts are only detected when they occur (resulting in error messages, and one program being closed, or a system crashing). In the present invention, such conflicts are predicted. Various TV programs or programs types (broadcast versus satellite) cannot be construed as "applications" as alleged in the Office Action. Even in digital format, such "programs" are nothing more than data (e.g., passive data that are processed), not applications (e.g., active commands and instructions that perform the processing) directing and controlling the processor. A re-run of "I Love Lucy" cannot be construed as a computer program or application. Moreover, such television programs (as opposed to computer programs) do not generate conflicts of resources of the processor. The only "conflict" that can occur with television programs is that two programs can be on at the same time.

(c) Independent claims 7, 16, and 20 refer to application modes of operation. The present invention may also encompass a variation wherein an application (program), when shifted to a different mode of operation (e.g., internet radio versus DVD playback), may create an application conflict. Again, this situation is not a conflict between the playback times of the shows or software, but a conflict (e.g., device conflict, memory conflict, interrupt conflict, etc.)

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that may occur within the processor. These claims refer to "application modes" as the present invention would encompass an embodiment in which different operational programs may be combined. In other words, these claims do not require the limitation of two distinct separate programs (applications) creating application conflict. These claims were designed to prevent a would-be infringer from attempting to "design around" the claims of the present application by merely combining two conflicting programs into one application and arguing that a single application is not covered by, e.g., claim 1. Applicant contends that all of the claims would cover such a scenario. However, claims 7, 16, and 20 were presented to explicitly recite that the two conflicting programs may in fact be portions of the same application. Claims 7, 16, and 20 have been amended to include the limitation of checking for application conflicts. Applicant submits that these claims (as amended) are also distinguishable over LaJoie. Again, the only "conflict" prediction in LaJoie is that of conflict between competing TV shows, not between device resource requests.

The Examiner disagrees for the following reasons:

(a) As from col. 29, lines 5-32, LaJoie teaches conflicts between *recordings* of different TV programs on a VCR at a predetermined time. In order to record a TV program on a VCR, an *application program* associated with that TV program must be set up (*to run in the computer background*) to record the TV program on the VCR at the predetermined time. However, if another *application program* associated with another TV program has been set up for recording at the same time, the conflicts between the two application programs is detected. Therefore, the

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conflicts here is the *conflict between two application programs* set up to record different TV programs.

(b) LaJoie does teach the conflict map between two *application programs* set up to record different TV programs at the same time and is determined before the recording application programs actually run (*Conflict detection and resolution detects and alerts the set-top terminal user of possible timer conflicts*; col. 29, lines 20-23). By that, LaJoie's system will prevent the two application programs from erroneously over-writing different TV programs to the *same VCR* at the same time. The conflicts here are clearly *predicted* before the application programs run recording programs and the conflicts here are indeed conflicts of resources of the processor, which in this case is two application programs compete for the *VCR*.

(c) As per independent claims 7, 16, and 20, the conflict prediction in LaJoie is that of conflict between device resource requests, not between competing TV shows. *Application program* that run *DBSS mode* and *application program* that run *LNBA mode* does send requests to compete for device resource, which is the *TV*, when switching between the two modes.

12. Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the fact(s) noticed.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiries

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon (Gary) D Nguyen whose telephone number is 703-305-8318. The examiner can normally be reached on Monday - Friday from 8 AM to 5:30 PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kistine L Kincaid can be reached on 703-308-0640. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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Nhon (Gary) Nguyen

August 11, 2003

Kristine Kincaid

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